



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/940,164	08/27/2001	Morgan Rey Benson	DP-306072	4379

7590 09/23/2004

MARGARET A. DOBROWITSKY  
DELPHI TECHNOLOGIES, INC.  
4TH FLOOR  
1450 W. LONG LAKE ROAD  
TROY, MI 48098

EXAMINER

WILLS, MONIQUE M

ART UNIT

PAPER NUMBER

1746

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/940,164	BENSON ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Monique M Wills	1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 14-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-~~14~~<sup>3</sup> is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

*Election/Restrictions*

Applicant's election without traverse of Group I, claims 1-13, on July 13, 2004 has been acknowledged and placed of record on file. Accordingly, claims 14-19 have been withdrawn.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3,6-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Velasquez et al. U.S. Patent 6,467,156.

Velasquez teaches a method of assembling a storage battery comprising simultaneously depositing current collectors (terminals) on platens, laminating them on individual electrodes in a bicell (col. 13, lines 20-30; col. 14, lines 45-55) and moving the terminals from a first position at a laminating station 103 (col. 13, lines 10-30) to a second, or subsequent position at a fusion station 149 (col. 14, lines 45-55). The fusion station 149 includes a pair of platens (153) for compressing and heating the bicell battery 151 to cause the various layers to fuse together, embracing Applicant's aligning plates, by aligning bicells for contact with the terminals. See Figure 3. The bicell and terminal are sealed in a packaging (col. 13, lines 1-

10). The bicells are compression sealed and heated with a pair of platens (col. 14, lines 45-60). The electrolyte is injected into the bicells at a filling station (col. 15, lines 34-40) and the packages are sealed using heated platens (col. 14, lines 40-55). The constituents of the cell may be cut to size during the assembly process (col., lines 45-60).

Velasquez does not expressly disclose sequentially depositing the terminals on the pallet in a first position, then contacting the terminals to bicells in a second position.

However, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to sequentially deposit the terminals on the pallet in a first position, then contact the terminals to bicells in a second position, selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results. In re Burhans, 154 F.2d 690, 69 USPQ 330 (CCPA 1946).

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4,5 & 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Velasquez et al. U.S. Patent 6,467,156 in view of Mas et al., U.S. Patent 6,348,283.

Velasquez teaches a method of making bicells as described hereinabove.

Velasquez is silent to depositing cover strips in contact with overlap of the terminals and exposed grids of the bicells.

Mas teaches that it is conventional to employ cover strips on the edge of electrode materials to prevent sharp corners of the electrodes from damaging the separator, and thereby, minimizing the occurrence of short-circuiting (col. 1, lines 33-53).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to deposit the cover strips of Mas on the exposed grids in the bicells of Velasquez, to prevent sharp corners of the electrodes from damaging the separator, and thereby, minimizing the occurrence of short circuiting.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Monique Wills whose telephone number is (571) 272-1309. The Examiner can normally be reached on Monday-Friday from 8:30am to 5:00 pm.

If attempts to reach Examiner by telephone are unsuccessful, the Examiner's supervisor, Michael Barr, may be reached at 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Application/Control Number: 09/940,164  
Art Unit: 1746

Page 5

Status information for unpublished applications is available through Private PAIR only.  
For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MW

09/20/04

**MICHAEL BARR**  
**SUPERVISORY PATENT EXAMINER**

A handwritten signature in black ink, appearing to read "Michael Barr", with a long horizontal flourish extending to the right.